Lincoln Memorial University

IS System and Data Backup and Restoration Standard	
Version: 3	**Effective Date: 1/1/2017**

Backup Retention Policy

Purpose:

The purpose of this standard is to safeguard the University's information assets, prevent loss of data due to accidental deletion or corruption, and to facilitate timely restoration of information and business process should a system failure occur.

Definitions:

Backup is the saving of electronic information onto digital storage media for the purpose of preventing loss of data in the event of equipment failure or destruction.

Restore is the process of bringing University information back from digital media and putting it on an online storage system when the data on the online storage system is lost or corrupted.

Standards Statement:

Information technology services will provide policy-based, system level, network-based backups of essential IS systems.

Backups of all LMU records and software must be retained such that computer operating systems and applications are fully recoverable, any exceptions to this policy must be approved by the system owner and the information security office. This may be achieved using a combination of image copies, incremental backups, differential backups, transaction logs, or other techniques.

Schedule of Backups:

Unless a system supporting an application or business function requires a custom schedule, Information Technology Services will backup systems using a default schedule of full backups and subsequent differential incremental backups. Different versions at the file level are maintained based on system requirements. Version

retention and deletion policies associated with different file versions are dictated by system requirements and criticality of the entire system.

Full system backups are performed prior to any major upgrade to recover system in case of any failures during change management.

In case of virtual server environments, additional point in time backups are taken on a weekly basis with subsequent differential backups prior to the next full backup.

Backups are performed by authorized personnel only.

System Owners must approve of a default or custom backup schedule of a system and any emergency backup and operations restoration plans.

Full backups will back up all files specified within a system's backup program, regardless of when they were last modified or backed up. Incremental backups will back up all files that have changes since the last successful incremental or full backup.

Through the use of full backups and subsequent incremental backups, backup windows (time period required to perform backups of one or more systems) will be minimized as will be the storage space (disk or tape) required to store the backed up data.

The frequency of backups is determined by the volatility of data; the retention period for backup copies is determined by the criticality of the data. . At a minimum, backup copies must be retained for 5 days.

All LMU record information accessed from workstations, laptops, or other portable devices should be stored on networked file server drives to allow for backup or be part of Druva backup solution.

Backup Verifications:

On a daily basis, logged information generated from each backup job will be reviewed for errors, monitoring of job duration, and to optimize backup performance where possible.

Data center operations staff will identify problems and escalate the issue to the server support staff who will take corrective actions to reduce any risks associated with failed backups. Test restores from backup tapes for each system will be performed periodically. Problems will be identified and corrected.

Retention Period:

The retention periods of information contained within system level backups are designed for recoverability and provide information as it existed on LMU-maintained systems during the time period defined by system backup program.

Backup retention periods are different from records management retention periods for information defined by legal or business requirements.

Offsite Storage:

At a minimum, one fully recoverable version of all LMU Records must be stored in a secure, off-site location. An off-site location may be in a secure space in a separate University building, or with an off-site storage vendor, or a partner higher education institution approved by the Chief Information Officer or Chief Data Officer.

Recovery Test:

Recovery procedures must be tested on an quarterly basis.

Media Management/Documentation:

Backup data is stored on disk based storage solutions dependent upon the nature and criticality of the data. In case of disk based storage a complete replica of the backed up

data is maintained in a secure off campus location. Data replication between the primary and secondary backup units is encrypted in transit as well as in rest. Backup images on assigned media will be tracked throughout the retention period defined for that particular data type. When all data on the backup media have expired disk media the storage space will be reallocated and reused.

Periodically and according to the recommended lifetime defined for the backup media utilized, the data center operational staff will retire and dispose of media so as to avoid media failures. In case of disk based solution industry best practices are followed to permanently remove the data from the backup units before they are decommissioned.

Restoration Requests:

In the event of accidental deletion or corruption of information, requests for restoration of information will be made to the Help Desk.

Information Services will carefully verify that the request for restoration of information is authorized by the owners of the information prior to performing the restoration and ensure that the information restored is restored to a file system location with access controls appropriate to the information being restored.

Inquiries:

Direct inquiries regarding this policy to:

Office Locations & Address

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